UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P. D. Rey. 1450

P O Box 1450 Alexandria, Virgima 22313-1450 www.usplo.gov

DATE MAILED: 06/30/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

70144 7590 0630/2009 HOLLAND & KNIGHT LLP 2099 PENNSYLVANIA AVE SUITE 100 WASHINGTON DC 20006 EXAMINER
THOMPSON, CAMIE S
ART UNIT PAPER NUMBER
1794

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/792,130 03/04/2004		03/04/2004	Jeong Dae Seo	K-0619	3916			
	TITLE OF INVENTION: ORGANIC ELECTROLUMINESCENT DEVICE							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	form should be used to correspondence including d below or directed off tions	or transing the Pa ierwise i	mitting the ISSU atent, advance or n Block 1, by (a	JE FEE and PUBLICAT rders and notification of a) specifying a new corre	TON FEE (if requiremaintenance fees verspondence address	ired). I vill be ; and/o	Blocks 1 through 5 st mailed to the current r (b) indicating a sepa	nould be completed where correspondence address as trate "FEE ADDRESS" for
CURRINT CORESPONDENCE ADDRESS (Note: Use Block I for any change of address) 70144 7590 665002009 HOLLAND & KNIGHT LLP 2099 PENNSYLVANIA AVE SUITE: 100 SUITE: 100				Fee	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
				I b	Cer	rtificate	of Mailing or Trans	mission g deposited with the United t class mail in an envelope above, or being faesimile ate indicated below.
WASHINGTON	, DC 20006							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR	₹	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/792,130	03/04/2004			Jeong Dae Seo			K-0619	3916
TITLE OF INVENTION	: ORGANIC ELECTRO	LUMIN	ESCENT DEVIC					
APPLN. TYPE	SMALL ENTITY	ISSU	JE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	09/30/2009
EXAM	INER	А	RT UNIT	CLASS-SUBCLASS]			
THOMPSON			1794	428-690000	_			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignce is ident h in 37 CFR 3.11. Comp	nge of C "Indicati ed. Use o	orrespondence ion form of a Customer		o 3 registered pater tively, le firm (having as a agent) and the nam orneys or agents. If printed. pp) patent. If an assign assignment.	memb es of u no nan	p to p to get is 3 dentified below, the de	ocument has been filed for
Please check the appropri		categori						oup entity Government
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				o. Payment of Fee(s): (Ple A check is enclosed. Payment by credit ca The Director is hereboverpayment, to Dep	rd. Form PTO-2038 v authorized to cha	3 is atta	iched. required fee(s), any de	
	s SMALL ENTITY state	is. See 37	7 CFR 1.27.	☐ b. Applicant is no lo				
NOTE: The Issue Fee and interest as shown by the	d Publication Fee (if req records of the United Sta	uired) wi tes Paten	II not be accepted t and Trademark	d from anyone other than Office.	the applicant; a reg	istered	attorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registration 1			
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DC 13-1450.	FR 1.31 U.S.C. J USPTO rden, sho O NOT SI	1. The information 122 and 37 CFR 122 and 37 CFR 122 Time will vary suld be sent to the END FEES OR 6	on is required to obtain or 1.14. This collection is educated the depending upon the indi- e Chief Information Offic COMPLETED FORMS T	retain a benefit by stimated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRES:	the pub minute omment Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tin nark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,130	03/04/2004	Jeong Dae Seo	K-0619	3916
70144	7590 06/30/2009		EXAM	UNER
HOLLAND &	KNIGHT LLP	THOMPSON	N, CAMIE S	
2099 PENNSYL	VANIA AVE	ART UNIT	PAPER NUMBER	
SUITE 100 WASHINGTON	DC 20006	1794 DATE MAILED: 06/30/2009		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 83 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 83 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)					
10/792,130	SEO ET AL.					
Examiner	Art Unit					
Camia S. Thompson	1704					

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to After Final Response filed 4/20/09.
- The allowed claim(s) is/are 1,2,4,6-10 and 12.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
 - Paper No./Mail Date _____
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. ☐ Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9.
 Other _____.
- /D. Lawrence Tarazano/

Supervisory Patent Examiner, Art Unit 1794

Application/Control Number: 10/792,130 Page 2

Art Unit: 1794

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or
additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the
payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Donald Monin on June 22, 2009.

The application has been amended as follows: Insert a period at the end of claims 1, 9, 10 and 12.

REASONS FOR ALLOWANCE

- 2. The following is an examiner's statement of reasons for allowance: Applicant claims an organic electroluminescence device comprising a substrate; a pair of electrodes and a light emitting layer disposed between the pair of electrodes wherein the light-emitting layer contains a green luminescent material represent by chemical formula 1 and a host material represented by a compound represented by H-12, H14, H15, H-19, H-20, H-23, H-26, H-27 and H-30. Applicant claims that the green luminescent material is represented by compounds G2 to G4, G-7 to G8, G-10-G11, G13-G16, G18-G-22, and G24-G43.
- The closest prior art, Matsuura et al., U.S. Pre Grant Publication 2005/0064233, teaches
 an electroluminescent device comprising a light emitting layer that comprises a dopant material

Application/Control Number: 10/792,130

Art Unit: 1794

and a host material,

. Matsuura fails to teach or suggest

compounds H-12, H14, H15, H-19, H-20, H-23, H-26, H-27 and H-30 as a host material and compounds G2 to G4, G-7 to G8, G-10-G11, G13-G16, G18-G-22, and G24-G43 as the green luminescent material.

EM28

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/792,130 Page 4

Art Unit: 1794

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camie S. Thompson whose telephone number is 571-272-1530. The examiner can normally be reached on Monday-Friday 8:00 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/ Supervisory Patent Examiner, Art Unit 1794 Camie S Thompson Examiner Art Unit 1794